

# Taxonomy and nomenclature of the Stonechat complex *Saxicola torquatus sensu lato* in the Caspian region

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**SUMMARY.**—We discuss the taxonomy of the Stonechat, the accepted broad species *Saxicola torquatus*, and find convincing reasons for recognising three species: European Stonechat *S. rubicola*, Eastern Stonechat *S. maurus* and African Stonechat *S. torquatus*. The nomenclature of the taxa breeding in the Caspian region is revisited and, based on an analysis of the original type descriptions and all relevant literature, and of four preserved specimens of Ehrenberg's taxon *hemprichii* from 1833 now in Berlin, we conclude that the name *variegatus* should not be applied to the taxon breeding north of the Caucasus but instead to the population in eastern Turkey and Transcaucasia, present-day *armenicus*. This places *armenicus* in the synonymy of *variegatus*, the latter having priority. Thirdly, a name is required for the north Caspian population. The name *hemprichii* is the oldest available and valid name for this population.

## Background

Several important contributions have recently been published regarding the taxonomy and nomenclature of the broad Stonechat complex *Saxicola torquatus*, of which a few have focused on those taxa in the Caspian region. It is now generally agreed that the complex is best treated as (at least) three different species, as first suggested by Wittmann *et al.* (1995) and Wink *et al.* in Urquhart (2002). More recent studies have supported this based on more extensive genetic sampling (Illera *et al.* 2008, Zink *et al.* 2009, 2010). Other than molecular indicators, the split is backed by consistent morphological differences and the fact that two of the three groups breed in partial sympatry apparently without interbreeding. In the area of sympatry, clear differences in habitat selection are evident. Genetically, Fuerteventura Stonechat *S. dacotiae* is more closely related to the European group of taxa of *S. torquatus sensu lato* than this group is related to similar-looking Asian taxa, a fact that has lent further support to the split. Retaining a large single Stonechat species, and avoiding a non-monophyletic species, would require that the quite distinct Fuerteventura Stonechat be subsumed as a subspecies under the Stonechat, hardly a desirable path.

The division into three species gives the following taxonomy:

1. The mainly European form becomes the European Stonechat *Saxicola rubicola* (von Linné, 1766). Two subspecies, connected by intermediate populations, are warranted: *rubicola* in much of continental Europe reaching east to the Caucasus and Transcaucasia, and *hibernans* (E. Hartert, 1910), breeding in the British Isles and coastal western France, north-west Spain and Portugal; breeders in the western Netherlands might also best be referred to this race.
2. The mainly Asian form becomes the Eastern Stonechat *S. maurus* (Pallas, 1773). This species has several recognised subspecies, but of immediate concern here are the following three Palearctic taxa: *maurus* breeding in Russia and marginally in adjacent parts of eastern Europe, in western and south-central Siberia, Kazakhstan and parts of Transcaspia, east to north-west Mongolia and south to Afghanistan and northern

Pakistan (possibly also in north-east Iran); *variegatus* (S. G. Gmelin, 1774) in eastern Ukraine on the lower Don, east Crimea, the Kalmykiya plains north-east to the Volga Delta area, in the south on the northern slopes of Caucasus, apparently reaching north Azerbaijan (hereafter 'NCT' for 'North Caspian Taxon'); and *armenicus* Stegmann, 1935, in north-east Turkey, Caucasus (apparently at least locally on the southern slopes), Transcaucasia and western and southern Iran (hereafter 'SCT' for 'South Caspian Taxon'). Status in Azerbaijan is not well known and needs to be better established. See Fig. 1 for an overview of the distribution of the discussed taxa.

- The mainly African form, breeding in much of Africa with c.15 subspecies described (some of which might warrant separation as species when better studied), but also with a population in south-west Saudi Arabia and western Yemen, becomes the African Stonechat *S. torquatus* (von Linné, 1766). The only race of any concern in a Palearctic context (and, depending on Palearctic limits adopted, arguably not even then) is southern Arabian *felix* G. L. Bates, 1936.

In preparing a new handbook to the birds of the Western Palearctic (Shirihai & Svensson in prep.) all available specimens of relevant taxa in several major collections (Tring, New York, Leiden, Paris, Berlin, Bonn, Stockholm, Copenhagen and Moscow) were examined by LS, and two field trips were undertaken by LS to north-east Turkey, the Caucasus and Transcaucasia in order, among other aims, to clarify the taxonomy of these stonechats. HS & LS also met in Tring and examined the collection there together. Finally, for the purpose of this work, HS & SF examined and measured two of the Ehrenberg types of *S. maurus* *hemprichii* in the Berlin museum. SF further searched and discovered two more types of this taxon in Berlin, as discussed below.

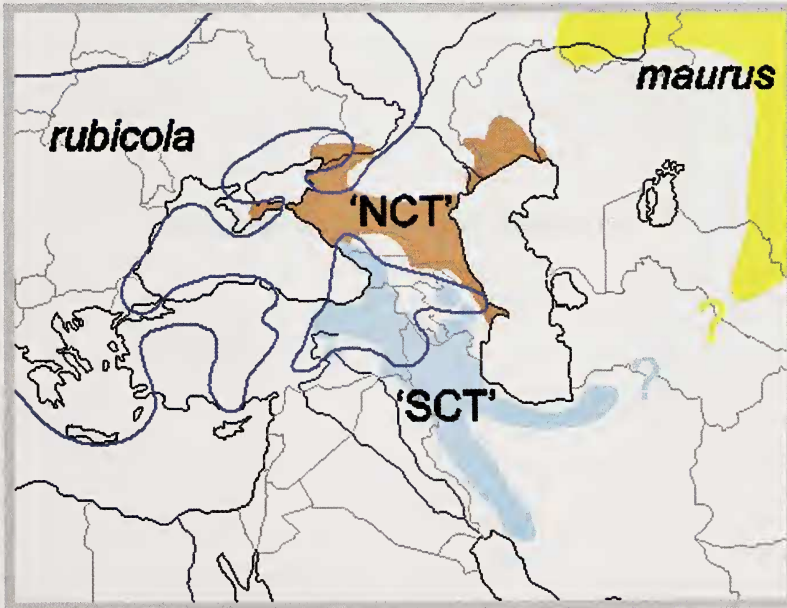


Figure 1. Map of the breeding range in the Caspian region of the discussed subspecies within the Stonechat complex, here treated as European Stonechat *Saxicola rubicola* (blue outline) and Eastern Stonechat *S. maurus* (yellow). The two taxa of the latter breeding in the Caspian region, current day *variegatus* and *armenicus*, have here been labelled as 'NCT' (= north Caspian taxon; orange) and 'SCT' (= south Caspian taxon; light blue), respectively, the reason for which is explained in the text (after Vaurie 1959, Cramp 1988, Urquhart 2002, Collar 2005, Zink *et al.* 2009; M. Banik *in litt.* 2011).

## Eastern Stonechats of the Caspian region

As mentioned above there are distinct populations of *S. maurus* in the north and south Caucasus. The correct application of names to these populations will be discussed after further background is given, but these two subspecies can be circumscribed as follows:

**NCT.**—The northern population has a very characteristic male plumage with extensive white portions on each side of the inner tail (between half and three-quarters of the outer tail feathers white), not unlike the pattern in many wheatears or male Red-backed Shrike *Lanius collurio*. This is easily seen on a flying bird, but can be more difficult to confirm on perched birds with closed tails. The amount of white in the tail on males is subject to a subtle cline; at its maximum in the Volga Delta region, becoming slightly more restricted in the south. Both sexes resemble nominate *maurus* from further east and north in that they have a large unstreaked pale rump patch, buffish when fresh, white when abraded and bleached. In comparison, European Stonechat *S. rubicola* has a streaked rump with usually limited white. The NCT male has a concentrated red-brown chest patch and a large white patch on the neck-sides, again more like nominate *maurus* and different from most *rubicola*. The NCT female is very similar to females of both nominate *maurus* and the SCT, and usually can be identified only if handled. The female has much less white on the base of the rectrices than the male, generally requiring that the tail-coverts be lifted to reveal the white, and a few females lack any. The name used for the NCT in Vaurie (1959), Ripley (1964), Urquhart (2002) and Dickinson (2003) has been *variegatus*.

**SCT.**—Resembles the NCT but differs in somewhat larger size (a certain overlap in all measurements between the two; Table 1), in having less white on the tail base in male plumage (at most the inner half of feathers white, but more commonly only one-third), often not visible even in flight, and darker, more saturated colours. In particular the dark

TABLE 1

Biometrics (mm) of four taxa of the Stonechat complex *Saxicola torquatus sensu lato*, **nomenclature according to conclusions presented here**. Measurements taken from skins according to standards described in Svensson (1992). Data separated by sex and presented as range, sample size (*n*), mean (in bold) and standard deviation (SD). All measurements by LS.

Taxon	<i>Saxicola r. rubicola</i>	<i>S. maurus variegatus</i> 'South Caspian Taxon'	<i>S. maurus hemprichii</i> 'North Caspian Taxon'	<i>Saxicola m. maurus</i>
Wing (max.)	♂ 63.0–69.0 mm <i>n</i> = 26, <b>66.2</b> , SD 1.59 ♀ 63.0–66.5 mm <i>n</i> = 17, <b>64.8</b> , SD 0.93	♂ 70.5–80.0 mm <i>n</i> = 94, <b>75.0</b> , SD 1.90 ♀ 70.0–76.5 mm <i>n</i> = 43, <b>72.8</b> , SD 1.62	♂ 68.0–76.0 mm <i>n</i> = 64, <b>72.0</b> , SD 1.52 ♀ 66.0–72.5 mm <i>n</i> = 22, <b>69.4</b> , SD 1.86	♂ 63.0–72.0 mm <i>n</i> = 22, <b>68.3</b> , SD 1.97 ♀ 64.0–70.0 mm <i>n</i> = 13, <b>66.7</b> , SD 1.39
Tail	♂ 43.0–49.0 mm <i>n</i> = 26, <b>46.0</b> , SD 1.83 ♀ 44.0–48.5 mm <i>n</i> = 17, <b>45.7</b> , SD 1.26	♂ 47.0–56.0 mm <i>n</i> = 93, <b>51.7</b> , SD 1.92 ♀ 47.0–54.5 mm <i>n</i> = 43, <b>50.2</b> , SD 1.65	♂ 44.0–52.0 mm <i>n</i> = 64, <b>49.1</b> , SD 1.57 ♀ 45.0–51 mm <i>n</i> = 22, <b>48.2</b> , SD 1.58	♂ 44.0–51.0 mm <i>n</i> = 21, <b>47.5</b> , SD 2.18 ♀ 45.0–50.0 mm <i>n</i> = 12, <b>47.0</b> , SD 1.49
Tail/wing ratio	♂ <i>n</i> = 26, <b>69.6</b> , SD 2.41 ♀ <i>n</i> = 17, <b>70.5</b> , SD 1.57	♂ <i>n</i> = 94, <b>69.0</b> , SD 1.90 ♀ <i>n</i> = 43, <b>68.9</b> , SD 2.16	♂ <i>n</i> = 64, <b>68.2</b> , SD 1.98 ♀ <i>n</i> = 22, <b>69.4</b> , SD 1.52	♂ <i>n</i> = 22, <b>69.5</b> , SD 1.97 ♀ <i>n</i> = 12, <b>70.4</b> , SD 2.21
Tarsus	♂ 21.0–22.9 mm <i>n</i> = 25, <b>22.0</b> , SD 0.60 ♀ 20.7–22.7 mm <i>n</i> = 17, <b>21.9</b> , SD 0.45	♂ 20.0–23.0 mm <i>n</i> = 79, <b>21.4</b> , SD 0.68 ♀ 19.5–22.2 mm <i>n</i> = 41, <b>21.1</b> , SD 0.65	♂ 19.4–22.2 mm <i>n</i> = 58, <b>21.1</b> , SD 0.66 ♀ 19.5–21.8 mm <i>n</i> = 22, <b>20.8</b> , SD 0.67	♂ 20.0–22.9 mm <i>n</i> = 22, <b>21.2</b> , SD 0.81 ♀ 19.8–22.2 mm <i>n</i> = 12, <b>21.1</b> , SD 0.74
Bill (to skull)	♂ 13.5–15.5 mm <i>n</i> = 23, <b>14.5</b> , SD 0.51 ♀ 13.1–15.3 mm <i>n</i> = 16, <b>14.3</b> , SD 0.64	♂ 13.1–15.8 mm <i>n</i> = 26, <b>14.5</b> , SD 0.58 ♀ 13.1–16.0 mm <i>n</i> = 41, <b>14.4</b> , SD 0.66	♂ 13.2–15.5 mm <i>n</i> = 63, <b>13.9</b> , SD 0.58 ♀ 13.2–14.8 mm <i>n</i> = 22, <b>13.8</b> , SD 0.41	♂ 12.7–14.4 mm <i>n</i> = 21, <b>13.9</b> , SD 0.47 ♀ 13.5–14.7 mm <i>n</i> = 12, <b>14.0</b> , SD 0.38



brick-red chest patch in contrast to the white belly is a striking feature on male SCT. The chest colour corresponds to, or is a mixture of, Vandyke Red and Burnt Sienna in Ridgway (1912, Pl. XIII *k* and II *k*, respectively). Females differ from the NCT in that they apparently invariably lack white in the tail. The name used for the SCT in most modern handbooks and checklists has been *armenicus*.

### Samuel Gottlieb Gmelin's *variegatus*

In *Reise durch Rußland zur Untersuchung der drey Natur-Reiche* ('Travel through Russia to explore the three realms of nature'), pt. 3 (1774: 105–107), S. G. Gmelin described a new bird which he found commonly in Schamachie (= present-day Samaxi in north-west Azerbaijan) on the southern slopes of the south-east Caucasus, and further east and south en route to Persia. He named the bird *Parus variegatus* (misspelled '*varietagus*' in the text but obviously a typographic error and corrected on Pl. 20: 3 of the same work), gave it a fairly good description for the time, including a detailed table of measurements, and mentioned that it had a white tail base without being more precise. The new bird is depicted in a rather crude woodcut illustration, but despite the picture's shortcomings one can see that it depicts a male stonechat in autumn plumage (Gmelin travelled in August). It is believed that no syntype survives. Gmelin collected many birds on his travels, some of which went to St. Petersburg (but apparently none collected so early are preserved). The specimen depicted may be considered to have been the type or one of several syntypes and may be taken to represent the named taxon.

The identification of Gmelin's *variegatus* as being the NCT, i.e. with much white in the tail in male plumage, has remained unchallenged until recently, when Mlíkovský (2011) proposed that it referred to the SCT. His arguments were that (a) the type locality must be regarded as Bandar-e-Anzali in Iran to where Gmelin was heading, not Samaxi where he first saw the bird and made his detailed description; (b) since only the SCT is known to breed in Iran this form must have been Gmelin's bird; and (c) since he read into Gmelin's extremely brief description of the tail (literally 'in the beginning white, then black') proof that it could only refer to the SCT. Incidentally, Mlíkovský got the tail pattern wrong when stating that it is the distal part which is white rather than the basal. He also claimed that Stegmann 'erroneously' believed that Gmelin's bird was described from Samaxi when the original description indisputably states that it was first seen there, and this place has since been correctly regarded as the type locality by Hartert (1910), Stegmann (1935), Gladkov (1954) and Ripley (1964). Thus there is no basis for 'correcting' the type locality to Bandar-e-Anzali, nor is there a need to do so as Samaxi (40°37'N, 48°38'E) lies within the breeding range of the SCT (Stegmann 1935; see below). Aware that his proposals would leave the NCT birds in need of a new name, Mlíkovský made a proposal in that context which we will address below.

However, Mlíkovský's conclusions matched those we had already reached for three different reasons.

First, Gmelin provided some very detailed measurements in a table. Several of these give rather curious distances of no practical use for today's ornithologists, but at least two prove crucial for the identification of the new bird. These are total length and tail length. The measurements in the table are in a variation of inches, and we owe much thanks to P. H. Barthel (*in litt.* 2012) for resolving this matter. The units in the Gmelin table are 'Zoll' (corresponding to the inch) and 'Linie' (corresponding to  $\frac{1}{12}$  of a Zoll). This means in turn that the total length of Gmelin's bird is 140 mm and tail length 54 mm. One of us (LS) has collected many measurements of both the NCT and the SCT, showing that the SCT is a larger bird than the NCT, and the measurements of Gmelin's bird match only the

TABLE 2

Known ranges for the two concerned taxa in the Caspian region compared to Gmelin's (1774) measurements of the new bird he found. Sexes combined. Measurements from skins according to standards in Svensson (1992), giving range, mean (in bold), sample size (*n*) and standard deviation (SD).

	Total length	Tail
'North Caspian Taxon'	117–137 mm <b>(125.8, <i>n</i> = 65, SD 4.75)</b>	44–52 mm <b>(48.7, <i>n</i> = 89, SD 1.76)</b>
'South Caspian Taxon'	119–146 mm <b>(131.0, <i>n</i> = 83, SD 5.49)</b>	47–56 mm <b>(51.2, <i>n</i> = 137, SD 1.97)</b>
Gmelin's bird	140 mm	54 mm

SCT (Table 2). We are fully aware of the limitations in using Gmelin's measurements of a freshly killed bird without knowing which detailed measuring technique he applied, and to compare them with modern measurements of specimens. Still, the measurements are there in the original description, they seem quite carefully taken and exact, and it would be similarly questionable not to make use of them at all. At least they serve as supporting though not conclusive evidence.

The second reason to believe Gmelin's bird is the SCT is rather surprisingly found in Stegmann (1935), where it is stated that the only certain breeder of the SCT found by that author was one collected on 20 May 1896 in Samaxi ('Schemacha'), in other words the place where Gmelin first found his bird! How Stegmann wrote this without noticing the apparent contradiction is hard to understand. After all, he accepted Gmelin's bird as being the NCT with type locality in Samaxi, then goes on to name the SCT and can only report one breeding locality for it, Samaxi. We have reasons to believe that the specimen mentioned by Stegmann is in the Zoological Institute in St. Petersburg. Confirmation of its presence there and its identity would naturally be of interest, but a request regarding this has met with no success.

Finally, a third supporting but not conclusive reason for believing that Gmelin described the SCT is offered by a closer study of Pl. 20: 3 of his work, reproduced here as Fig. 2, depicting what we consider must serve to represent the type. Although it is impossible to see any undisputed amount of white on the tail base of this bird, that could be due to the fact that even rather large white portions of outer rectrices in birds are often concealed when the tail is folded. One might argue that there is a tiny amount of white at the base of the outermost rectrix, but this could also be interpreted as a white covert. However, the depiction certainly shows



Figure 2. Gmelin's bird as depicted on Pl. 20: 3 in Gmelin (1774), here shown to represent the type of the South Caspian Taxon of Eastern Stonechat, now *Saxicola maurus variegatus*. Scanned from the original in the library of Museum für Naturkunde, Berlin.

a male stonechat, possibly an adult male judging from the large white wing patch, in fresh autumn plumage, and one that at least did not have very extensive white visible in the tail. One might speculate that had the bird had a large amount of white (like any normal NCT male) it would have been tempting for the author and the artist to show at least some of this striking feature. But either the bird had very little white on the tail base, so there was no reason to show it in the plate, or the author and artist decided it was more important to convey the bird in an absolutely true and lifelike image concealing the white as it might appear in life. We cannot know the answer, but we can make the educated guess that it probably had rather limited white since none is shown.

## The name to be applied to the northern population

Even before it became clear that the name *variegatus* had to be reassigned to the SCT, in separating northern and southern populations we faced a problematic morphological analysis because there appeared to be very few specimens of southern birds. For a long time we were aware of a mere three specimens in Tring, and rather few in other museums. However, in June 2011, HS found three full trays in Tring marked '*Saxicola torquata hemprichii*', which had previously been overlooked. These specimens, over 90 in all, proved to be of the SCT, and immediately made it possible to compare a sufficient sample of the southern birds with sympatric *rubicola* and to be sure that the differences were not just due to individual variation. The new material clearly showed that the two sympatric forms differed considerably in size with no overlap in wing length (Table 1). Apart from the size difference, they differed clearly in several morphological traits with no overlap. Knowledgeable local ornithologists in Transcaucasia, notably V. Y. Ananian, who had accompanied LS in Georgia, had always claimed that *rubicola* and the SCT behaved as different species, but firm proof seemed to be lacking. Now both genetic and morphological evidence supported the split.

That these Tring specimens were labelled *hemprichii* was a surprise because this name lay quite deep in synonymy. The name was not mentioned in Vaurie (1959), Ripley (1964) or Urquhart (2002). It was found in Hartert (1910: 707) as a synonym of *Pratincola torquata maura* with the name *variegatus* senior to it in the synonymy. Use of the name *hemprichii* for these specimens seems to be due to the revision by Grant & Mackworth-Praed (1947), who provided data from Stegmann (1935) showing that males of '*armenica*' were longer winged than those associated with '*variegata*' (then viewed as the northern birds) or '*maura*'. Grant & Mackworth-Praed noted that Stegmann had not discussed the name *hemprichii* and wrote that Ehrenberg's description agreed, as regards the white at the base of the tail, with *armenica*. Thus the 'long series' of long-winged '*armenica*' came to be labelled *hemprichii* based on an evaluation of Ehrenberg's brief description. The latter name, of course, has over 100 years priority over Stegmann's name.

In fact, however, *hemprichii* is not what Grant & Mackworth-Praed thought. Ehrenberg (1833) described a new stonechat that differed from *rubicola* by having a white base to the tail and a white rump patch. He mentioned 20 specimens, without designating a holotype, deposited in the Museum für Naturkunde (ZMB), Berlin. The available type material (Figs. 3–4) shows that it has more evident white at the base of the tail and that the name cannot apply to the SCT and must apply to the NCT, so the name on the trays of these Tring specimens was wrong.

Mlíkovský suggested that a suitable new name for the NCT would be *amaliae* Buturlin, 1929. This is almost 100 years younger than the name *hemprichii* but more importantly it is inapplicable as it is a synonym of *rubicola*, a form without any white in the tail and with a streaked rump.





Figure 3 (above). Three of the four Ehrenberg types of *Saxicola maurus hemprichii* held in ZMB, Berlin. The lectotype is seen at the far left, while two of the three known paralectotypes are seen to the right of it (H. J. Götz © Museum für Naturkunde, Berlin)



Figure 4 (left). One of the four Ehrenberg types of *Saxicola maurus hemprichii* held in ZMB, Berlin. This paralectotype, ZMB 4920, is preserved as a mount (H. J. Götz © Museum für Naturkunde, Berlin)

## Fixation of the name *Saxicola hemprichii* Ehrenberg, 1833

Ehrenberg (1833) based his original description in the *Symbolae physicae*, found on folio page 'aa', on 20 syntypes. He gave no locality for the species but associated it with *Saxicola Rubicola* Nubiae Licht. Unfortunately Lichtenstein's name cannot be traced in printed or unpublished catalogues (Lichtenstein 1823, 1854), or in the ornithological inventory in Berlin or on the specimen labels. None of the latter are originals, because these were removed and replaced by museum labels when the specimens were integrated in the collection; similar habits existed in other European museums up to this time and perhaps later. Ehrenberg (1833) mentioned all of the regions where they had collected as localities where they found *S. hemprichii* except 'Syria' (now Lebanon; Mlíkovský & Frahnert 2011). Of the 20 specimens, nine were registered in the museum's catalogue (started only in the 1850s and based on label information from the available specimens) as *Saxicola hemprichii*, under the localities Nubia (= Egypt / Sudan), Gumfudde (= Al Qunfudhah, Saudi Arabia), Abessinia (= Eritrea, according to Stresemann 1954) and Egypt. Today, only four type specimens can be found in the Berlin collection. Most of the syntypes are no longer present due to unregistered early exchanges. Some may even have been destroyed during World War II.

These four specimens are undoubtedly the NCT being three adult males and one first-year female, the three males with extensive white in the tail, the female with some white on the bases of the tail feathers concealed below the tail-coverts. It is conceivable that the other 16 specimens may have differed, especially as some females will have been less easily identified than the specimens discussed above, and could prove, if found, to represent other forms belonging to this species complex. It is therefore necessary to designate a lectotype.

We designate adult male ZMB 4918 (Nubia) as the lectotype, chosen because its label shows that it was previously the only specimen labelled as 'the type' by Erwin Stresemann (and is the only specimen so labelled). However, we have found no evidence that he published a lectotype designation. Should such a lectotypification be found, our considered action here will be consistent with his. Due to the lectotypification, the type locality must be treated as Egypt / Sudan and this bird is, of course, a migrant away from its breeding grounds in the northern Caucasus or north-west Caspian.

The three other former syntypes at ZMB, two adult males with very similar appearance and one female, and the missing 16 further specimens, become paralectotypes.

List of types of *hemprichii* registered at the Museum für Naturkunde, Berlin (extant specimens indicated in bold; data in square brackets added from information in printed and archive sources, or following examination of the specimens)<sup>1</sup>

**Lectotype:** ZMB 4918, skin, [adult] male, collected [between November 1821 and August 1822] in 'Nubien' [= Egypt / Sudan].

Paralectotype (lost): ZMB 4919, male, collected [between November 1821 and August 1822] in 'Nubien' [= Egypt / Sudan].

**Paralectotype:** ZMB 4920, mount, [adult] male, collected [between November 1821 and August 1822] in 'Nubien' [= Egypt / Sudan].

Paralectotype (lost): ZMB 4921, female, collected [between November 1821 and August 1822] in 'Nubien' [= Egypt / Sudan].

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<sup>1</sup> A further specimen of Hemprich & Ehrenberg (ZMB 4929, mount, first-year female, collected [between July 1823 and January 1824] in Tor [= El-Tor, Egypt] and catalogued as '*Saxicola (Pratincola) rubecola* Bechst.', but labelled on the mount as '*Saxicola hemprichii* Ehr. 1828', was not included in the type series. As the label seems to be younger than the catalogue entry, it is probable that Hemprich & Ehrenberg did not determine it as *S. hemprichii* since it is a first-year female with scarcely visible white portions in the tail. It was determined as *S. maurus hemprichii* by LS in 2012.



**Paralectotype:** ZMB 4922, skin, [adult] male, collected [in February 1825] at Gumfudde [= Al Qunfudhah, Saudi Arabia].

Paralectotype (lost): ZMB 4923, juvenile, collected [between April and July 1825] in 'Abessinien' [= Eritrea].

Paralectotype (lost): ZMB 4924, juvenile, collected [between April and July 1825] in 'Abessinien' [= Eritrea].

**Paralectotype:** ZMB 4925, skin, [first-year] female, collected [between April and July 1825] in 'Abessinien' [= Eritrea].

Paralectotype (lost): ZMB 4926, juvenile, collected [between 1820 and 1825] in Egypt.

## Conclusions

The above findings lead to the nomenclature, synonymy and range statements below.

### SAXICOLA MAURUS

*Saxicola maurus hemprichii* Ehrenberg

*Saxicola Hemprichii* Ehrenberg, 1833, *Symbolae physicae*, Folio, page 'aa'.—No locality given but associated with Nubia (in winter). Locality fixed as 'Egypt / Sudan'.

*Parus Variegatus* S. G. Gmelin, 1774, *Reise Russl.*, 3, p. 105, Pl. 20: 3.—Shemakha (= Samaxi, Azerbaijan). Name previously incorrectly applied to this taxon.

Range includes northern Azerbaijan, north-west Caspian shores to Volga Delta region, in west, to east Ukraine.

*Saxicola maurus variegatus* S. G. Gmelin

*Parus Variegatus* S. G. Gmelin, 1774, *Reise Russl.*, 3, p. 105, Pl. 20: 3.—Shemakha (= Samaxi, Azerbaijan).

*Saxicola torquata armenica* Stegmann, 1935, *Doklady Akad. Nauk. S.S.R., n. ser.*, 3, 9. 47.—Adshafana, Kurdistan.

*Saxicola torquata excubitor* Koelz, 1954, *Contrib. Inst. Regional Explor.*, no 1, p. 13.—Dorud, Luristan, Iran.

Range includes eastern Turkey, southern slopes of Caucasus, Transcaucasia, northern and western Iran.

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